10. Economic Status of Household (Opinion of Female Interviewer)

| | Percent |
|---|---|
| Extremely Poor | 34.7 |
| Poorer than Average | 38.7 |
| Average | 20.4 |
| Above Average | 4.8 |
| Extremely Wealthy | 1.5 |

## C. Fertility and Mortality

### 1. Living Children for Female Respondents
N = 486

| Number of Children | Percent of Respondents |
|---|---|
| 0 | 6.6 |
| 1 | 11.9 |
| 2 | 14.2 |
| 3 | 14.8 |
| 4 | 14.4 |
| 5 | 11.9 |
| 6 | 10.1 |
| 7 | 6.4 |
| 8 | 5.6 |
| 9 | 2.7 |
| 10 | 0.8 |
| 11 | 0.4 |

Mean Age of Respondents = 35.1
Mean Number of Living Children = 3.93
Median Number of Living Children = 3.67
Mean Number of Children Ever Born = 5.82

### 2. Children Died for Female Respondents
N = 486

| Number of Children | Percent of Respondents |
|---|---|
| 0 | 30.9 |
| 1 | 24.1 |
| 2 | 14.2 |
| 3 | 13.2 |
| 4 | 7.2 |
| 5 | 4.5 |
| 6 | 3.1 |
| 7 | 0.6 |
| 8 | 0.4 |
| 9 | 0.6 |
| 10 | 0.2 |

Mean Age of Respondents = 35.1
Mean Number of Children Dead = 1.89
Median Number of Children Dead = 1.29

3. Births in Household Since Last Jeshyn

| Number | Frequency | Percent |
|---|---|---|
| 0 | 328 | 67.5 |
| 1 | 147 | 30.3 |
| 2 | 11 | 2.2 |

Total Births = 169
Average Births per Household = 0.348
Births per 1000 Population = 48.51
Estimated Crude Birth Rate = 41.5

4. Marital Age-Specific Fertility Rates

| Age | Marital Age-Specific Fertility Rates | Percent Women Married | Age Specific Fertility Rates |
|---|---|---|---|
| 15-19 | 440 | 39.1 | 172 |
| 20-24 | 498 | 79.5 | 396 |
| 25-29 | 400 | 93.4 | 374 |
| 30-34 | 373 | 95.5 | 356 |
| 35-39 | 328 | 96.6 | 317 |
| 40-44 | 227 | 91.5 | 208 |
| 45-49 | 27 | 84.6 | 23 |
| | | Total Fertility Rate | 9226 |

5. Deaths in Household Since Last Jeshyn

| Number | Frequency | Percent |
|---|---|---|
| 0 | 401 | 82.5 |
| 1 | 78 | 15.4 |
| 2 | 10 | 2.1 |

Total Deaths = 98
Average Deaths per Household = 0.2
Deaths per 1000 = 28.1
Estimated Crude Death Rate = 24.2
Percent of Deaths Under 5 Years = 59.2
Infant Mortality Rate = 157

6. Percent of All Deaths Under Five by One-Year Age Intervals

| Age | Percent of Deaths |
|---|---|
| 0-1 | 43.1 |
| 1-2 | 29.2 |
| 2-3 | 15.5 |
| 3-4 | 3.4 |
| 4-5 | 8.6 |

2. Health Problems, Health Behavior, and Attitudes toward Health Services

a. Household Members Reported Sick in Last Two Weeks = 21.6%

| Illness Reported: | Percent | |
|---|---|---|
| Respiratory Illness | | 15.8 |
| Colds | 2.7 | |
| Coughs | 2.1 | |
| Black Cough | 0.5 | |
| Pneumonia | 3.7 | |
| TB | 3.2 | |
| Sore Throat | 0.8 | |
| Other | 5.0 | |
| Gastrointestinal Illness | | 12.6 |
| Vomiting | 0.8 | |
| Diarrhea | 6.9 | |
| Dysentery | 4.5 | |
| Cholera | .4 | |
| Fever | | 14.6 |
| Fever Unspecific | 8.8 | |
| Malaria | 5.0 | |
| Other | 0.8 | |
| Aches and Pains | | 34.9 |
| Stomach Ache | 13.9 | |
| Headache | 4.5 | |
| Joint Pains | 3.7 | |
| Arthritis | 1.5 | |
| Other | 11.3 | |
| Eye Problems | | 1.7 |
| Women's Disease | | 3.8 |
| TOTAL | | 83.4 |

(Note: Malnutrition was named illness in only 0.7% of cases.)

b. Percent Reporting Illness Who Are Still Sick at Interview = 81.6%

c1. Primary Treatment Sought for Illness

N = 496

| | Percent |
|---|---|
| Home Treatment | 37.7 |
| Basic Health Center | 16.7 |
| Private Doctor Local | 8.9 |
| Hospital Regional | 6.5 |
| Pharmacist | 6.3 |
| Bazaar | 5.8 |
| Private Doctor Regional | 5.2 |
| Private Doctor Kabul | 4.0 |
| Dokhan | 3.2 |
| Mullah | 2.8 |
| Hakim | 0.4 |
| Cupper | 0.2 |
| Hospital Kabul | 0.4 |

c2. Satisfied with Treatment Received

N = 462

No - 54%
Yes - 46%

Satisfaction by Source:

| Source | Percent |
|---|---|
| Home | 49.6 |
| Basic Health Center | 64.7 |
| Private Doctor Local | 75.0 |
| Hospital Regional | 71.1 |
| Pharmacist | 52.4 |
| Bazaar | 57.9 |
| Private Doctor Regional | 53.5 |
| Private Doctor Kabul | 57.1 |
| Dokhan | 31.6 |
| Mullah | 52.4 |

J. Most Serious Illness (Total reported by males and females with three possible mentions each.)
N = 1622

| | Percent of Total Mentions | |
|---|---|---|
| Respiratory Illness | | 31.1 |
| Colds | 4.8 | |
| Cough | 1.1 | |
| Black Cough | 7.2 | |
| Pneumonia | 8.8 | |
| TB | 8.2 | |
| Sore Throat | 0.8 | |
| Other | 0.2 | |
| Gastrointestinal Illness | | |
| Vomiting | 0.7 | 25.4 |
| Diarrhea | 8.6 | |
| Dysentery | 11.8 | |
| Cholera | 2.4 | |
| Fevers | | 20.6 |
| Fever Unspecific | 8.3 | |
| Malaria | 9.0 | |
| Other | 3.3 | |
| Aches and Pains | | 8.2 |
| Stomach Ache | 3.6 | |
| Headache | 2.3 | |
| Other | 2.3 | |
| Measles | | 7.5 |
| Eye Problem | | 2.0 |
| TOTAL | | 94.8 |

(Note: Malnutrition mentioned only 0.2% as most serious illness)

e. Most Needed Health Improvement in Village
N = 1241

| Improvement Needed | Percent of Total Mentions |
|---|---|
| 1 Medicine | 26.8 |
| 2 Doctor | 24.4 |
| 3 Hospital | 10.5 |
| 4 Cleanliness in General | 8.9 |
| 5 Better Food | 7.5 |
| 6 Pharmacy | 3.7 |
| 7 Roads | 2.6 |
| TOTAL | 84.4 |

f. Illnesses Associated with All Deaths in the Last Year

| Illness | Percent of All Deaths |
|---|---|
| Dysentery/diarrhea | 15.3 |
| Jinns | 14.3 |
| Tuberculosis | 11.2 |
| Fever | 8.2 |
| Swelling | 6.1 |
| Stomach ache | 3.1 |
| Black cough | 3.1 |
| Pneumonia/bronchitis | 3.1 |
| Measles | 3.1 |
| Heart disease | 3.1 |
| Unknown | 4.1 |
| Other | 25.1 |
| | 99.8 |

g. Illnesses Associated with Child Deaths by Age in the Last Year
N = 58

| | Numbers of Deaths | | | | | |
|---|---|---|---|---|---|---|
| | Age | | | | | |
| Illness | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | Total |
| Jinns | 9 | 0 | 3 | 0 | 0 | 12 |
| Diarrhea/dysentery | 4 | 5 | 0 | 1 | 1 | 11 |
| Pulmonary/respiratory | 2 | 3 | 2 | 0 | 1 | 8 |
| Fever | 2 | 0 | 2 | 0 | 0 | 4 |
| Measles | 0 | 1 | 1 | 1 | 0 | 3 |
| Other | 5 | 7 | 1 | 0 | 3 | 16 |
| Unknown | 3 | 1 | 0 | 0 | 0 | 4 |
| TOTAL | 25 | 17 | 9 | 2 | 5 | 58 |

h. Illness Associated with Death: All Children of Female Respondents, Age < 5, Reported to Have Died
N = 700

| | Numbers of Deaths Age | | | | | | |
|---|---|---|---|---|---|---|---|
| Illness | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | Total | Percent |
| Jinns | 136 | 35 | 22 | 6 | 8 | 207 | 29.6 |
| Diarrhea/Dysentery | 19 | 17 | 29 | 7 | 6 | 78 | 11.2 |
| Black Cough | 21 | 12 | 15 | 11 | 2 | 61 | 8.7 |
| Measles | 11 | 6 | 21 | 12 | 9 | 59 | 8.4 |
| Pneumonia/Bronchitis | 33 | 13 | 6 | 4 | 2 | 58 | 8.3 |
| Fever | 19 | 6 | 10 | 1 | 2 | 38 | 5.4 |
| Smallpox | 5 | 6 | 10 | 7 | 4 | 32 | 4.6 |
| Injury | 6 | 0 | 3 | 1 | 2 | 12 | 1.6 |
| Malnutrition | 15 | 0 | 3 | 0 | 0 | 18 | 2.6 |
| Other | 86 | 14 | 15 | 14 | 8 | 137 | 19.6 |
| Total | 351 | 109 | 134 | 63 | 43 | 700 | |
| Percent | 50.1 | 15.6 | 19.1 | 9.0 | 6.1 | | |

i. Number of Dais (midwives) in Female Respondent's Village
N = 436

| Number | Respondents |
|---|---|
| 0 | 57.4 |
| 1 | 13.8 |
| 2 | 10.1 |
| 3 | 2.1 |
| 4 | 0.8 |
| Unknown | 15.8 |

j. Use of Dai by Female Householders
N = 377 (female respondents)

No - 51.5%
Yes - 48.5%

k. Residence of Dai
N=189 (female respondents)

| Location | Percent |
|---|---|
| Own village | 89.9 |
| Nearby village | 8.5 |
| Bazaar | 0.5 |
| Town | 1.1 |

l. <u>Cost of Dai Services for Delivery</u>
N = [illegible] (Female respondents)

Mean Cost = 108 Afs
Median Cost = 50 Afs

Note: Exchange rate at the time of survey was approximately 50 Afs = $1.00 (U.S.).

m. <u>For Women Not Reporting Use of Dai:</u>

If dai does not assist in delivery, who does?
N = 296

| | Percent |
|---|---|
| Women in Household | 93.9 |
| Women Outside Household | 1.7 |
| ANM at Health Center | 0.3 |
| Regional Hospital | 1.0 |
| Kabul Hospital | 0.3 |
| Other | 2.7 |

n. <u>Satisfaction with Assistance Received at Delivery</u>

N = 472 Female Respondents

| | Percent |
|---|---|
| Very Satisfied | 6.6 |
| Satisfied | 50.8 |
| Intermediate | 30.9 |
| Unsatisfied | 8.9 |
| Very Unsatisfied | 2.8 |

o. <u>Percent of Household Who Have Visited BHC</u>

N = 231 Males
476 Females

| | |
|---|---|
| Male | 51% |
| Female | 67% |

p. Use of BHC by Distance of Village from BHC

N = 476 Female Respondents

| Distance from Village | Percent Used BHC |
|---|---|
| 1 km. | 75% |
| 10 km. | 61% |
| 15 km. | 63% |

q. If Used BHC

What do You Think of the Quality of Medicine and Services of the BHC?

| | Male (N=140) | Female (N=289) |
|---|---|---|
| Very Good | 7.9% | 9.3% |
| Good | 50.0% | 48.8% |
| Intermediate | 17.9% | 17.3% |
| Poor | 23.6% | 24.0% |
| Very Poor | 0.7% | 0.3% |

r. What Do You Think of the Personal Treatment You Receive at the BHC?

| | Male (N=144) | Female (N=286) |
|---|---|---|
| Very Good | 11.8% | 11.5% |
| Good | 59.0% | 52.8% |
| Intermediate | 14.6% | 18.2% |
| Poor | 9.7% | 17:5% |
| Very Poor | 4.9% | 0 |

# The Village Health Worker: The Need and Potential as Determined by Survey in Three Provinces of Afghanistan

## I. Introduction

The study of health practices, attitudes and needs in three provinces of Afghanistan, results of which are presented in this preliminary report, had several objectives. The primary ones were to obtain additional information on the means by which villagers meet their health needs and to collect information to be used in planning local health services, especially the development of a village health worker scheme.

The study, which was carried out from August to November, 1976, complements and augments a prior study, "A Field Survey of Health Needs, Practices and Resources in Rural Afghanistan", which was conducted at five basic health centers in the Parwan-Kapisa Province in the summer of 1974. While much of the information obtained in the Parwan Survey parallels that of the more recent Three Province Study and can be used comparatively, the population of this subsequent survey has been selected to be more representative of Afghanistan as a nation than was that studied in the Parwan-Kapisa survey. Not only are the provinces selected --Ghazni, Baghlan and Helmand--geographically, ethnically and economically different from each other, but the sites within each province have also been selected to represent the variety in village structure and location. For instance, in each province, villages have been selected at varying distances from the existing Basic Health Center in order to allow for comparison in health patterns and uses of BHC's services by access. Another difference between studies is that in the Three Province Survey, all interviews were conducted in households systematically selected from within villages; interviewing in the prior survey was restricted to the vicinity of the basic health center.

A major addition in the Three Province Survey has been a set of questions to elicit information as to villagers' attitudes towards the best means by which their own needs can be met. Specifically, respondents were asked to report their feelings as to the feasibility of a village health worker scheme for their own village and the means by which such workers could best be selected and trained. They were also questioned

s. Primary Reason why BHC not used

| | Male (N=98) | Female (N-143) |
|---|---|---|
| No one sick | 46.9% | 27.5% |
| Services in town better | 7.1% | 10.5% |
| No medicines available | 6.1% | 7.7% |
| No money | 4.1% | 7.7% |
| Family objection | 0% | 7.0% |
| Too far away | 1.0% | 6.3% |
| Go to private doctor | 0% | 5.6% |
| Staff requires money | 10.2% | 0% |
| Too expensive | 2.0% | 0% |
| Heard bad things | 4.1% | 0% |

t. Where do you receive the best treatment for an illness which cannot be treated at home?

| | Male (N=227) | Female (N=468) |
|---|---|---|
| Village | 2.6% | 0% |
| Pharmacies | 0.9% | 3.4% |
| Mullahs or Shrines | 5.3% | 25.0% |
| BHC | 34.8% | 33.3% |
| Local Private Doctor | 3.1% | 8.8% |
| Regional Private Doctor | 8.8% | 14.5% |
| Kabul Private Doctor | 7.0% | 2.6% |
| Regional Hospital | 7.0% | 6.4% |
| Kabul Hospital | 29.1% | 3.0% |
| Other | 0.4% | 3.0% |

u. What is your best estimate of the total amount of money which your household spent on health services since Jeshyn last year?

| | Male | Female |
|---|---|---|
| Mean Year Expenditures | 2878 Afs | 3873 Afs |
| Median Year Expenditures | 1000 Afs | 1999 Afs |

v. Household Expenditures on Health Services in Last Year by Province/Village

| | Mean Expenditure | |
|---|---|---|
| | Male | Female |
| Ghazni | 2217 | 5526 |
| Khonadai | 3478 | 7326 |
| Khonsal Kosh | 1011 | 2709 |
| Jabaar Khel | 1654 | 11150 |
| Khanadar | 2645 | 4090 |
| Bakhtyar | 1322 | 4293 |
| Baghlan | 3580 | 3302 |
| Tawashakh | 3452 | 3380 |
| Khoja Kheder | 672 | 218[illegible] |
| Kona Qala | 4117 | 2679 |
| Qashlak Qala | 2286 | 2344 |
| Nav Bahar | 2317 | 2815 |
| Ghazmara | 2730 | 4829 |
| Helmand | 2756 | 3035 |
| Loye Bagh | 2891 | 3504 |
| Nawliabad | 7373 | 5392 |
| Saidabad | 3678 | 3428 |
| Nowzad | 2343 | 3510 |
| Konjak | 1564 | 1872 |
| Karghai | 2721 | 1271 |

w. What is your opinion of the drugs which you can get in the dokhan (village shop)?

| | Percent |
|---|---|
| Good | 26.8 |
| Average | 27.4 |
| Poor | 45.2 |

x. Do you get advice from anyone when a family member is sick?

N = 235 (male)

No - 84.4%

y. Of those who get advice, what is the sex of the person you get advice from?

| | Percent |
|---|---|
| Male | 91.7 |
| Female | 8.3 |

z. Where is this person located?

| | Percent |
|---|---|
| Own village | 86.0 |
| Nearby village | 5.6 |

a. Does the person who gives advice also give medicine?

No - 76.3%

b. Do you know someone in your village who can give you an injection?

| | Male Respondents (N=205) | Female Respondents (N=481) |
|---|---|---|
| Yes | 37.1% | 58.6% |
| Sex of Injector is Male | 96.0% | 82.0% |
| Injector does not give medicine | 86.7% | -- |

c. Do you think children are healthier or less healthy than 5 years ago?

| | Male Respondents (N=228) | Female Respondents (N=436) |
|---|---|---|
| Healthier | 63.6 | 38.1 |
| Same | 15.6 | 23.9 |
| Less Healthy | 20.9 | 38.1 |

d. Do you think that more or fewer children die now than 5 years ago?

| | Male Respondents (N=228) | Female Respondents (N=436) |
|---|---|---|
| More | 11.6 | 28.3 |
| Same | 21.3 | 14.8 |
| Fewer | 67.1 | 56.9 |

e. Do you think that health services are better or worse than 5 years ago?

| | Male Rs (228) | Female Rs (436) |
|---|---|---|
| Better | 69.2 | 51.9 |
| Same | 12.0 | 4.6 |
| Worse | 9.4 | 13.5 |
| Don't Know | 9.4 | 30.1 |

3. Child Rearing Practices

How long do you breast feed your boy babies? (N = 474 Females)

Mean Length - 23.5 Months

How long do you breast feed your girl babies? (N = 474 Females)

Mean Length - 23.9 Months

At what age do you begin to feed your child foods in addition to milk? (N = 475 Females)

Mean Age 11.5 Months

What are the best foods to begin feeding your babies?

| First Mentioned Food (452) | | Second Mentioned Food (434) | |
|---|---|---|---|
| Bread | 17.0% | Milk | 10.4% |
| Milk | 16.6% | Rice | 9.0% |
| Rice | 10.6% | Bread | 7.0% |
| Soft Rice | 8.6% | Yogurt | 6.5% |
| Bread and Tea | 6.0% | Soft Rice | 6.5% |
| Vegetable Soup | 4.4% | Vegetable Soup | 4.9% |
| Yogurt | 2.2% | Butter | 4.9% |

At what age do you first give your baby these foods:

| | Mean Age Months (N = 486 Females) |
|---|---|
| Soft Meat | 20.2 |
| Eggs | 26.3 |
| Bread | 11.3 |
| Tea | 11.7 |
| Fruits | 16.5 |
| Vegetable | 18.8 |

How often do you give your children powdered milk?

| | Percent | (N = 475) |
|---|---|---|
| Never | 79.8 | |
| About Once/Month | 0.8 | |
| About Once/Week | 6.5 | |
| Three to Four Times Week | 2.3 | |
| Every Day | 10.5 | |

How often do you give your children animal milk?

| | Percent | (N = 413) |
|---|---|---|
| Never | 28.8 | |
| About Once/Month | 2.3 | |
| About Once/Week | 20.5 | |
| Three to Four Times Week | 7.0 | |
| Every Day | 41.4 | |

During your last pregnancy did you take any medicines to prepare you for a healtny baby? (N = 479)

| | |
|---|---|
| No | 97.1% |
| Yes | 2.9% |

Sources of Medicine:

| | Percent | (N = 13) |
|---|---|---|
| Woman in Village | 15.4 | |
| Pharmacist | 23.1 | |
| BHC | 7.7 | |
| Private MD Local | 23.1 | |
| Private MD Regional | 15.4 | |

After your last baby was born did you get advice from anyone outside your household on how to keep it healthy? (N = 480 Females)

No - 96.9%

Yes - 3.1%

Source Mentioned:

| | Number Mentioned | (N = 15) |
|---|---|---|
| Hakimji | 6 | |
| Dai | 3 | |
| Other Woman | 3 | |
| Others | 3 | |

In your opinion what is the most important thing to do to keep your baby healthy?

| | Male Respondents (155) | Female Respondents (397 |
|---|---|---|
| Clean Food and Water | 14.8% | 35.3% |
| Consult Good Doctor | 11.6% | 0 |
| Good Food | 11.0% | 12.3% |
| Vitamins | 9.7% | 3.3% |
| Health Personnel Near Village | 9.7% | 0 |
| Cleanliness | 5.8% | 49.1% |

Have you ever treated any of your children for diarrhea?

| | Males (233) | Females (467) |
|---|---|---|
| No | 47.2% | 14.4% |
| Yes | 52.8% | 85.6% |

Should you feed your child when he has diarrhea?

| | Males (233) | Females (467) |
|---|---|---|
| No | 33.0% | 27.4% |
| Yes | 66.5% | 70.0% |
| Don't Know | 0.4% | 2.6% |

Should you give your child water when he has diarrhea?

| | Males (234) |
|---|---|
| No | 21.8% |
| Yes | 78.2% |

What are best foods for a child with diarrhea?

| | Males(172) | Females(315) |
|---|---|---|
| Soft Rice | 32.6% | 37.0% |
| Soft Rice and Oil | 9.3% | 0 |
| Nothing | 7.0% | .3% |
| Water | 5.2% | 1.0% |
| Bread | 4.1% | 12.7% |
| Cheese, Yogurt, Qurbot | 4.1% | 2.2% |
| Bread and Tea | 1.1% | 11.7% |
| Soup Vegetable | 0.8% | 3.5% |

## 4. Attitudes Towards the Potential for Village Health Worker

Respondent's opinion on feasibility of village health worker in his/her village.

| | Males (235) | Females (483) |
|---|---|---|
| Not Feasible | 17.4% | 3.7% |
| Feasible | 78.3% | 95.2% |
| Don't Know | 4.3% | 1.0% |

If not feasible, why not?

| | Males (36) | Females (6) |
|---|---|---|
| Person not available | 33.3% | 28.6% |
| No one learned enough among us | 25.0% | 0 |
| People are poor | 8.3% | 14.3% |
| Not feasible for this village | 8.3% | 14.3% |
| Medicine and doctor good enough | 2.8% | 14.3% |
| Men won't permit it | 0 | 14.3% |

What type of person would be best to select as VHW?

| | | Males (198) | Females (421) |
|---|---|---|---|
| Age | Young | 23.6% | 10.1% |
| | Middle-Aged | 21.1% | 37.4% |
| | Older | 5.1% | 38.9% |
| | Don't Know | 30.8% | 8.0% |

| | | Males (198) | Females (421) |
|---|---|---|---|
| Sex | Male | 13.7% | 11.6% |
| | Female | 6.3% | 43.2% |
| | Both | 80.0% | 44.9% |

| | | Males (198) | Females (421) |
|---|---|---|---|
| Education | Mean Years Education | 9.8 years | 11.7 years |
| Literacy Required? | Yes | 100% | 81.3% |
| Should person have experience outside village? | Yes | 94.3% | 98.4% |

Best Qualities for VHW

| | Males (183) | Females (421) |
|---|---|---|
| Good character and patience | 40.4% | 28.3% |
| Proper manner | 15.3% | 2.6% |
| Muslim and humanitarian | 10.4% | 4.5% |
| Experienced | 8.2% | 1.0% |
| Clever and intelligent | 6.6% | 26.1% |
| Good person | 1.0% | 21.6% |

How should VHW be selected?

| | Males (182) | Females (438) |
|---|---|---|
| By the people | 47.1% | 42.5% |
| By the government | 39.5% | 40.0% |
| By government and people | 3.5% | 2.3% |
| By village leader | 7.6% | 11.9% |
| By government and village leader | 0.6% | 0.2% |
| Should be chosen from among injectionists | 0.6% | 1.7% |
| By leaders and people | 1.2% | 1.6% |

Do you know any person in your village who would make a good V.H.W.?

| | Males (220) | Females (460) |
|---|---|---|
| No | 73.2% | 82.8% |
| Yes | 26.8% | 17.2% |

Of person mentioned

| | | Males (220) | Females (460) |
|---|---|---|---|
| Mean Age | | 33.[illegible] years | 31.5 years |
| Sex | Male | 91.4% | 61.0% |
| | Female | 8.6% | 37.7% |
| Education - Mean Years | | 9.2% | 7.9% |
| Literacy | | 82.8% | 72.0% |

| | Males | Females |
|---|---|---|
| Experience outside village required. | 63.8% | 61.5% |

Why would this person make a good VHW?

| | Males (52) | Females (71) |
|---|---|---|
| Relative of village chief | 0 | 4.2% |
| Relative of respondent | 0 | 8.5% |
| Has no other work | 0 | 1.4% |
| People like him/her | 38.0% | 15.5% |
| Person is useful | 12.0% | 2.8% |
| Knows how to give injections | 4.0% | 1.4% |
| Good education | 16.0% | 16.9% |
| Person will help | 0 | 5.6% |
| Person is informed | 14.0% | 4.2% |
| Person is clever | 14.0% | 31.0% |

If there was a person in the village who provided medicines and whose job it was to improve health, should he/she be paid?

| | Males (217) |
|---|---|
| No | 9.2% |
| Yes | 80.2% |
| Don't Know | 10.6% |

on their willingness to supply labor and money for the improvement of village sanitation and water supply.

As in the previous survey, emphasis has been placed on obtaining information on child nutritional practices, an area of utmost interest in the planning of local level health and educational programs. Weights, heights and upper arm circumferences were obtained for children under five years of age to be used as an estimate of the nutritional status of rural Afghan children.

Finally, in this report, some of the implications of preliminary findings for the planning and management of a Village Health Worker program for rural Afghanistan will be discussed.

This preliminary report will be followed by a more detailed comprehensive report which will explore in greater depth the complex interactions between health problems and health actions in the seventeen villages studied.

How should VHW be paid?

| | Males (186) |
|---|---|
| Government should provide salary | 27.1% |
| People should provide salary | 43.4% |
| People could not provide salary | 19.9% |
| People should provide part of salary | 6.6% |

Could a woman from this village be trained to work on village health problems if training were nearby and she could return home in evenings from training?

| Males (220) | Females (376) |
|---|---|
| 29.5% | 10.1% |

Same question with training farther away?

| Males (220) | Females (376) |
|---|---|
| 34.1% | 7.4% |

Male Respondents, would you allow your wife or daughter to be trained to work on village health problems?

Yes 26.8% (N = 142)

5. Communications in Village

For females, Do you over listen to the radio? (455)

No - 52.7%

Yes - 47.3%

Of these women who listen, how many times a week do you listen? (N=245)

| | Percent |
|---|---|
| Less than 1 | 13.5 |
| 1 | 4.1 |
| 2 | 11.0 |
| 3 | 5.7 |
| 4 | 1.2 |
| 5 | 0.4 |
| 6 | 1.6 |
| 7 | 62.4 |

Where is radio located that you listen to?

| | Percent |
|---|---|
| Our Home | 66.7 |
| Friends Home | 24.3 |
| Relatives Home | 3.6 |
| Other place in village | 5.0 |
| Bazaar | 0.5 |

Which program is most interesting? (N=210)

| | |
|---|---|
| Stories | 2.8 |
| Farmers' Program | 3.7 |
| Radio | 2.3 |
| News | 9.7 |
| Music | 62.0 |
| Family Life | 19.4 |

For males, how many days in a week do you listen to the radio?

| | | |
|---|---|---|
| 0 | 50.3 | |
| 1 | 5.1 | |
| 2 | 2.1 | |
| 3 | 2.5 | |
| 4 | .8 | Mean = 2.1 times week |
| 5 | 2.5 | |
| 6 | 2.5 | |
| 7 | 25.3 | |

Men's Favorite Programs (N = 109)

| | |
|---|---|
| Stories | 1.8 |
| Farmer's Program | 27.5 |
| Radio | 6.4 |
| News | 33.0 |
| Music | 19.3 |
| Family Life | 5.5 |

Location of Radio Men Listen To

| | |
|---|---|
| Our home | 64.9 |
| Friends home | 14.4 |
| Relatives home | .9 |
| Other place in village | .9 |
| Bazaar | 18.0 |

Asked of Males

Would it be permissable for your wife to go to the following places?

| | % Would Allow |
|---|---|
| Female friends in village | 41.8 |
| Bazaar | 7.8 |
| Basic Health Center | 12.9 |
| Shrine | 6.5 |

Asked of Females

Do you have your husband's permission to go to any of the following places without a companion?

| | % With Permission |
|---|---|
| Female Friends in Village | 3.3 |
| Bazaar | 6.7 |
| Basic Health Center | 44.3 |
| Shrine in Village | 19.0 |

6. <u>Sanitation</u> (Male Respondents Only)

Primary Source of Drinking Water (N = 190)

| | |
|---|---|
| Well in Yard | 22.9 |
| Well in Village | 1.6 |
| River | 5.9 |
| Jui | 37.8 |
| Spring | 12.8 |
| Kariz | 19.1 |

Satisfied with water supply?

Yes - 78.1%

Would you contribute your labor to improve the drinking supply of your village if government specialists were available?

Yes - 86.1%

Would you contribute financially to improve the water supply in your village if government specialists were available?

Yes - 60.3%

Primary Sanitation Used by Household.

| | | |
|---|---|---|
| 1. | Latrine in house | 3.7 |
| 2. | Latrine in yard* | 39.2 |
| 3. | Deep hole in yard | 3.7 |
| 4. | Deep hole outside yard | 15.3 |
| 5. | Hole in yard | 0.5 |
| 6. | No facilities | 27.0 |

Are you satisfied with the sanitation facilities available?

Yes - 54.5%

Willing to help with labor to improve?

Yes - 81.4%

Willing to help with money to improve?

Yes - 48.4%

7. Attitudes Toward Family Size

How many more children would you like to have?

| | Males (118) | Females (333) |
|---|---|---|
| 0 | 63.5% | 65.4% |
| 1 | 2.7% | 3.3% |
| 2 | 10.1% | 7.8% |
| 3 | 5.9% | 10.8% |
| 4 | 1.6% | 3.0% |
| 5 | 5.0% | 3.3% |
| 6 | 1.6% | 4.5% |
| 7 | 4.2% | 6.9% |
| 8 | 5.0% | 0.7% |
| Mean Number Additional Children Desired | 1.6 | 1.2 |

Number of Additional Boys Wanted

| Number | Males | Females |
|---|---|---|
| 0 | 53.6% | 60.4% |
| 1 | 7.2% | 5.3% |
| 2 | 13.8% | 12.5% |
| 3 | 6.5% | 13.6% |
| 4 | 5.8% | 3.1% |
| 5 | 10.9% | 3.6% |
| 6 | 2.1% | 1.2% |
| | Mean = 1.46 | Mean = 1.11 |

Number of Additional Girls Wanted

| Number | Males | Females |
|---|---|---|
| 0 | 67.3% | 79.6 |
| 1 | 9.0% | 9.3 |
| 2 | 9.6% | 6.6 |
| 3 | 7.1% | 3.7 |
| 4 | 1.3% | 0.5 |
| 5 | 5.1% | 0.3 |
| 6 | 0.6% | 0.0 |
| | Mean = 0.85 | Mean = 0.37 |

Number of Additional Children Wanted by Female Respondents

N=333

| Number of Live Children | Number of Additional Children Wanted |
|---|---|
| 0 | 2.45% |
| 1 | 3.20% |
| 2 | 2.92% |
| 3 | 1.53% |
| 4 | 0.74% |
| 5 | 0.64% |
| 6 | 0.46% |
| 7 | 0.17% |

| Age of Female R | Mean Number of Additional Children Wanted |
|---|---|
| 15 - 19 | 3.91 |
| 20 - 24 | 2.96 |
| 25 - 29 | 2.47 |
| 30 - 34 | 1.53 |
| 35 - 39 | 0.98 |
| 40 - 44 | 0.64 |
| 45 - 49 | 0.50 |

Would you be interested in learning about ways that would allow you to increase the amount of time between pregnancies?

| | Males (210) | Females (323) |
|---|---|---|
| Would be interested | 69.0% | 91.6% |

## 8. Nutritional Status of Children

### Arm Circumference Measurement: Children < 5 years

N=471

| Green | Yellow | Red |
|---|---|---|
| 31.2% | 36.7% | 32.1% |

### All Children (Age < 5)

### Arm Circumference

| | Green | Yellow | Red | |
|---|---|---|---|---|
| Sick in last two weeks | 17.8% | 30.2 | 51.9 | (N = 129) |
| Sick recently but recovered | 35.0% | 30.0% | 35.0% | (N = 20) |
| Sick recently and still sick | 15.9% | 30.8% | 53.3% | (N = 107) |
| Not sick in last two weeks | 34.8% | 40.0% | 25.2% | (N = 330) |

### All Children (Age 5)

### Arm Circumference

| Age | Green | Yellow | Red | |
|---|---|---|---|---|
| 0 | 10.8% | 21.6% | 67.6% | (N = 37) |
| 1 | 3.0% | 27.3% | 69.7% | (N = 66) |
| 2 | 10.5% | 49.5% | 40.0% | (N = 105) |
| 3 | 31.4% | 52.4% | 16.2% | (N = 105) |
| 4 | 56.4% | 29.5% | 14.1% | (N = 78) |

Boys (Age < 5)

Arm Circumference

| Age | Green | Yellow | Red | |
|---|---|---|---|---|
| 0 | 5.9% | 29.4% | 64.7% | (N = 17) |
| 1 | 6.1% | 33.0% | 60.6% | (N = 37) |
| 2 | 13.7% | 58.8% | 27.5% | (N = 51) |
| 3 | 36.2% | 51.7% | 12.1% | (N = 58) |
| 4 | 53.3% | 33.3% | 13.3% | (N = 30) |

Girls (Age < 5)

Arm Circumference

| Age | Green | Yellow | Red | |
|---|---|---|---|---|
| 0 | 15.0% | 15.0% | 70.0% | (N = 20) |
| 1 | 0.0% | 21.2% | 78.8% | (N = 33) |
| 2 | 7.4% | 40.7% | 51.9% | (N = 54) |
| 3 | 25.5% | 53.2% | 21.3% | (N = 47) |
| 4 | 58.3% | 27.1% | 14.6% | (N = 48) |

## II. Methodology

The provinces selected for the study were determined by the Ministry of Public Health (MOPH) in accordance with its overall scheme for the expansion of health services into rural areas. Within each province, existing basic health centers were selected as focal points for village selection. Health centers were selected on the basis of their length of establishment and potential to have had an impact upon the community as well as upon the desire to achieve a representative variation of geographical, social and economic conditions within the province. Village selection was accomplished by preparing grid maps of areas adjacent to the BHC and randomly selecting villages at 1 km., 10 km., and 15 km. from the health center. (See map next page.) Within the village, household selection was done systematically from pre-lists of households, using a set pattern of numbering in each village. Within a household, attempts were made to interview an adult female and an adult male preferably, but not exclusively, a husband and wife. The discrepancy between the number of female interviews conducted (486) and the number of male interviews (237) represents primarily the fact that many men were engaged in agricultural activities at great distances from the villages during the interviewing period.

All interviews were carried out by trained interviewers using instruments which had been designed and pretested prior to the survey. (See Appendices A and B, male and female questionnaires used.) Interviews with female respondents were carried out exclusively by female interviewers. Male interviewers were used for males. In each household, only a single eligible respondent of each sex was interviewed resulting in only one wife of a polygnously-married man being included in the sample. Each interview required between 40 and 50 minutes to complete, a length which did not affect cooperation, as judged by respondents' reactions. No efforts were made to coerce interviewee cooperation; as an example, in one area originally selected for the sample, suspicion and lack of cooperation on the part of householders made it necessary to seek an alternative sample site in order to complete the number of interviews necessary for a representative sample.

All children aged 1 - 5 years in households were weighed by

## IV. Implications of Findings for the Planning and Development of a Village Health Worker Program

Over the course of the past several years, there has been an increasing awareness that a vast majority of health problems encountered in rural settings of developing countries may be adequately treated or prevented by making use of local resources. The "Barefoot Doctor" of China is the most frequently mentioned example of success with this approach. (For other examples, see "A Review of Alternative Approaches to Health Care Delivery" prepared by MSH.)

Regardless of the success of the village health worker concept in several countries, the planning and development of such a program is not simple, and lack of proper planning and understanding for the environment in which a village health worker (VHW) serves has, on several occasions, led to failure. A list of information helpful, if not essential, to the planning of a VHW program is long and includes such questions as:

- the most prevalent illnesses in the community
- the needs of the village as perceived by villagers themselves
- the population at greatest risk
- the health services presently available and utilized
- villagers' satisfaction with present health services
- villagers' receptivity toward the VHW concept
- villagers' perceptions of best VHW selection and remuneration procedures
- the average village health expenditure
- the willingness and capability of villagers to support a health worker
- the special problems facing women and children in receiving care and information
- communication networks within the village and between village and surrounding communities
- the availability of appropriate individuals in the village to be trained as health workers

The findings of the Three Province Survey presents much of this information; however, no attempt will be made here to review each item of information with implications for the establishment of a village health worker program. Instead, only some of the most salient findings will be discussed.

Health Problems

The prevalent illnesses of the rural Afghan village, as recorded by both actual morbidity and mortality as well as by villagers' attitudes towards the most serious illnesses, are relatively few in number and, most frequently, of a nature amenable to treatment. Such treatment could be provided by a trained local health worker. For instance, six basic categories of illnesses compose more than 94% of the illnesses described as "most serious" by villagers. Likewise, those illnesses associated with both adult and infant deaths are limited in number and frequently preventable or treatable at the village level.

Unrecognized health problems are another important potential source of intervention for health workers. Specifically, child malnutrition and child rearing practices which cause it could undoubtedly be affected by a village health worker involved in intervention and education of mothers.

Needs of Villagers as Perceived by Villagers Themselves

It should be noted that the single most frequently mentioned "most needed health improvement" is access to medicines. It has been estimated that a VHW could be trained to understand and dispense "16 basic medicines" especially if proper precautions and supervision were built into the structure of the program. Such a distribution system for medicines would also serve to control the cost of drugs if medicines were procured through a central source, such as the Basic Health Center.

Population At Greatest Risk

All information on morbidity and mortality points out clearly that infants and young children bear the greatest burden of sickness and death in rural Afghanistan. For instance, approximately one-half of all deaths reported in a year occured among those under five. Likewise, data from this survey and previous ones indicate that women in the population suffer a higher incidence of death and illness than males of comparable age.

Services Presently Available to the Village

This survey, as do previous ones, points out vividly that there is not a vacuum of health services in the village. There are many persons including midwives, pharmacists, injectionists, shopkeepers, and others, who currently provide services and advice at the local level. While the quality of these services is not always viewed as satisfactory by respondents, these providers do represent a cadre of local health workers who could be retrained and supervised to provide proper village health care. This is an especially important consideration in the case of midwives and other female health care providers, who might play an effective role in the education of village women.

Health Expenditures of Households

Respondents in this survey reported mean annual health expenditures of over 2,800 Afs. This amount is divided among a wide variety of sources of care. In assessing whether a village could support a VHW--and many respondents report a willingness of the village to provide payment--it is important to consider the amount of money which a village currently expends in its health seeking. As a theoretical estimate, it is useful to calculate the expenditures of an average size village of 300 households.

| | | |
|---|---|---|
| Village with 300 households X 2800 Afs/year | = | 840,000 Afs/yr. |
| If only 5% of this expenditure were used to support a VHW and supplies | = | 48,000 Afs/yr. |
| ∴ Monthly village health worker budget | = | 3,500 Afs |
| ∴ Monthly household allocation/month | = | 11.6 Afs |

The theoretical nature of these estimates must be kept in mind. For instance, the mean annual reported spending less than 100 Afs for health care in the year prior to the survey. Nonetheless, the ev[illegible]nce does indicate that villages could become more self-sufficient if the appropriate means were available for the training and support of local health workers.

Feasibility of a VHW Program

The majority of respondents, 78% of males and 95.2% of females, expressed the opinion that it would be possible to have a village health

worker in their own village. A significant number of men (25%) knew someone who they felt appropriate for the job. One limitation is the availability of village women who could be trained. Less than 30% of males and 10% of females felt that it would be possible to recruit a woman from their village for a program if it were to require training outside the village. Nonetheless, 26.3% of men said that they would allow their wives or daughters to participate in such a training program. The aggregate data indicates that, if proper consideration were taken of cultural and village constraints, a Village Health Worker program using either males or females could be set up.

Another constraint is literacy. Very few Afghan rural women are literate. Even though villagers themselves place a high value on literacy as a prerequisite for a VHW, one approach to circumventing this problem is to design training programs which do not presuppose or require literacy.

The interviewing experience also made abundantly clear that there are areas of rural Afghanistan where a VHW program would have only limited potential for success. For instance, in one pre-selected interviewing site the teams were met with resistance necessitating the selection of an alternative sample site. The hostility which they experienced would appear to indicate that the villagers, for one reason or another, do not eagerly await solutions or intrusions from the outside world. Such resistance is not the case for most villages, however, and where it does exist, it appears to be undisguised, making a decision as to whether a village is a good candidate for a VHW program relatively easy.

Attitudes Towards Basic Health Centers

The majority of households, both near the BHC and at a distance of up to 15 kms. away, reported having used its services. The attitudes of those who have used the BHC, while not uniformly complimentary, indicate a general satisfaction with the service it provides. This suggests that a plan to use BHC staff and facilities in the vital role of supervising, resupplying and referral would receive support at the village level.

Child Nutrition and Child Rearing Practices

The results of this survey--as well as the previous one--point out starkly the fact that malnutrition is one of the most serious health problems--if not the most serious--facing the Afghan villager. It is also increasingly obvious that current child rearing attitudes and practices are direct contributors to the infant and child malnutrition problem.

The implications of this for a VHW program is also clear. Any program for training of VHWs should provide comprehensive education in nutrition and should stress the role of the worker in providing information and changing child feeding habits, including the timing of weaning, length of breast feeding, types of foods for supplementation and the treatment and feeding of children with diarrhea.

The fact that women are severely limited in their ability to travel emphasizes the importance of recruiting and training female health workers for roles in health education and the provision of services in the village.

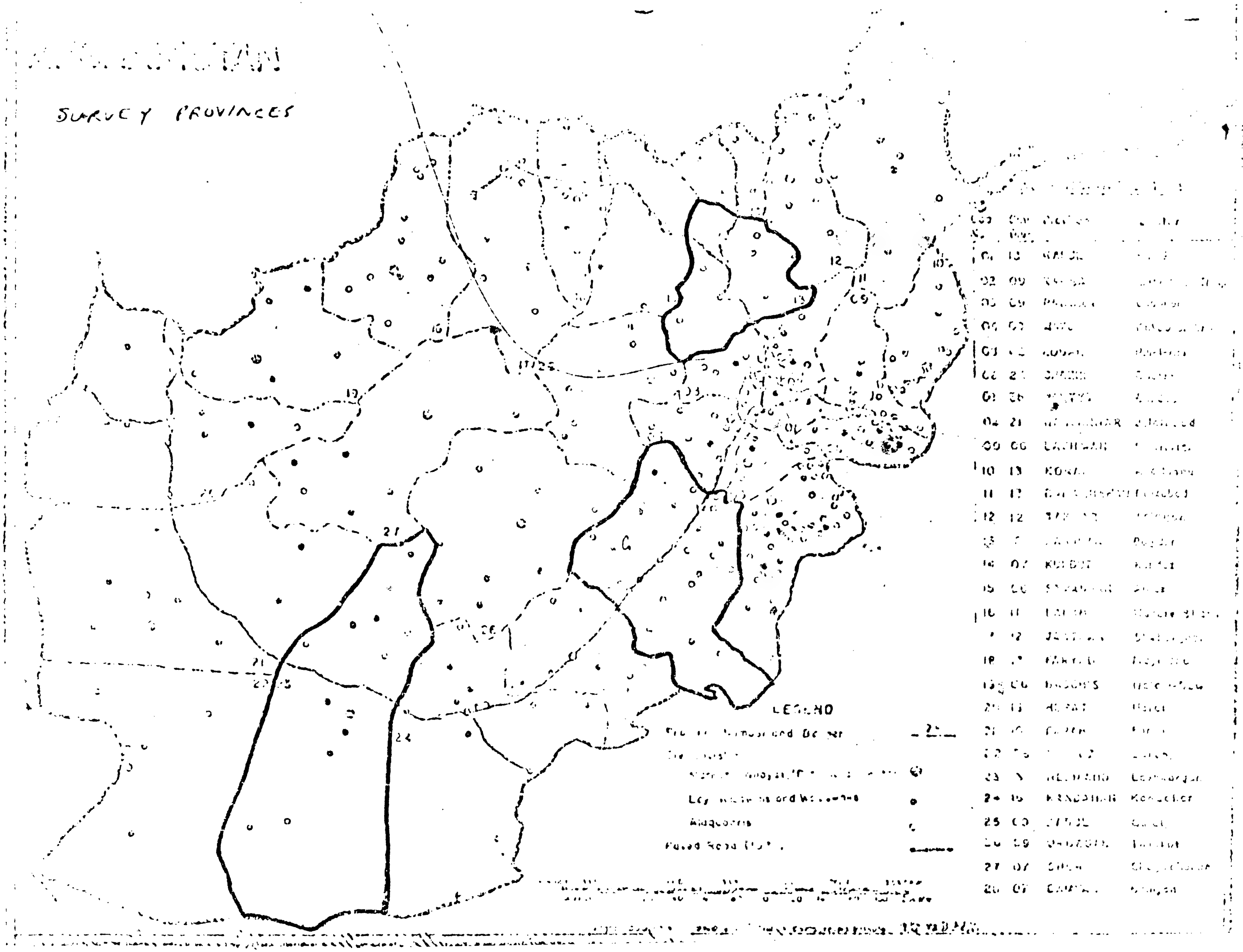
Again, this survey, in which over one-third of all children 1-4 years of age were classified as malnourished by their arm circumference measurement, strongly points to a need for priority to be given to the analysis of national nutritional problems and to the advisability of the formation of a National Nutrition Planning Commission to plan programs directed to these problems.

Communication

While the findings present cause for great concern in regard to child health and levels of knowledge among mothers, they also provide cause for optimism. For instance, the fact that over 50% of women report listening to the radio (62% of these daily) is a hopeful sign. Currently the radio is the most underused aid to development in Afghanistan. Programs aimed at educating village women by radio appear to have potential.

Radio should also be mentioned as a means of constantly updating and motivating VHWs. The model for this can be found in the Radio Forum used in Nigeria to communicate with village extension workers over a wide geographical area

Another reason for optimism is the large number of men (69%) and women (34%) who are interested in learning about means of spacing intervals between births--an improvement which has ramifications for both maternal and infant health. The implication of this finding for the role of the VHW in the provision of family guidance information and services is clear.


SURVEY PROVINCES
LEGEND
HERAT
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female interviewers using Salter scales. Heights and arm circumference measurements were carried out on the same children using standardized instruments.

Training of interviewers was conducted over a two week period and included classroom instruction, field interviewing, and evaluation of performance. The practice interviewing also served as a pretest for the questionnaire. Interviewer performance was quality controlled in the field by team supervisors and by the training staff. The number of interviews conducted by village and province during the three months of fieldwork was:

<u>Number of Interviews</u>

| Province | Village | Female | Male | Total |
|---|---|---|---|---|
| Ghazni | Khonadai | 32 | 27 | 59 |
| | Khonsai Kosh | 36 | 11 | 47 |
| | Jabaar Khel | 22 | 16 | 38 |
| | Khanacara | 21 | 9 | 30 |
| | Bakhtyar | 30 | 16 | 46 |
| Province Total | | 141 | 79 | 220 |
| Baghlan | Tawashakh | 26 | 12 | 38 |
| | Khoja Kheder | 31 | 9 | 40 |
| | Kona Qala | 27 | 16 | 43 |
| | Qashlak Qala | 30 | 14 | 44 |
| | Nav Bahar | 29 | 14 | 43 |
| | Ghezmarg | 27 | 10 | 37 |
| Province Total | | 170 | 75 | 245 |
| Helmand | Loye Bagh | 30 | 16 | 46 |
| | Nawliabad | 30 | 14 | 44 |
| | Saidabad | 31 | 12 | 43 |
| | Nowzad | 27 | 10 | 37 |
| | Konjak | 32 | 11 | 43 |
| | Karghai | 24 | 18 | 42 |
| Province Total | | 174 | 81 | 255 |
| Total | | 485 | 235 | 720 |
| Unknown Province | | 1 | 2 | 3 |
| Grand Total | | 486 | 237 | 723 |

## III. Findings

### 1. The Population

#### A. Characteristics of Respondents

| | Male | Female |
|---|---|---|
| Number Interviewed | 237 | 485 |
| Mean Age | 46.5 | 35.1 |
| Heads of Household | 89.5% | |
| Wives of Heads | | 86.0% |

Number of male interviews in which opposite sex interviewed: 98%

Number of female interviews in which opposite sex interviewed: 46.7%

Additional Wives of Respondents' Husbands

N = 486

| Number | Percent |
|---|---|
| 0 | 74.9% |
| 1 | 23.0% |
| 2 | 1.0% |
| 3 | 0.6% |

Mean Number Wives/Husband = 1.24

## B. Characteristics of Households

### 1. Distance of Household to Basic Health Center

| Kms. | Percent |
|---|---|
| 1 km | 40% |
| 10 km | 35% |
| 15 km | 25% |

### 2. Individuals in Household

| | Reported by Males | Reported by Females |
|---|---|---|
| Mean number persons | 7.57 | 7.04 |
| Mean number males | 4.08 | 3.68 |
| Mean number females | 3.86 | 3.56 |

### 3. Individuals Listed in Household by Females
N = 486

| | Number | Mean Household Size |
|---|---|---|
| Total | 3483 | 7.16 |
| Male | 1779 | 3.63 |
| Female | 1694 | 3.46 |

Mean Age of Total Household 21.0

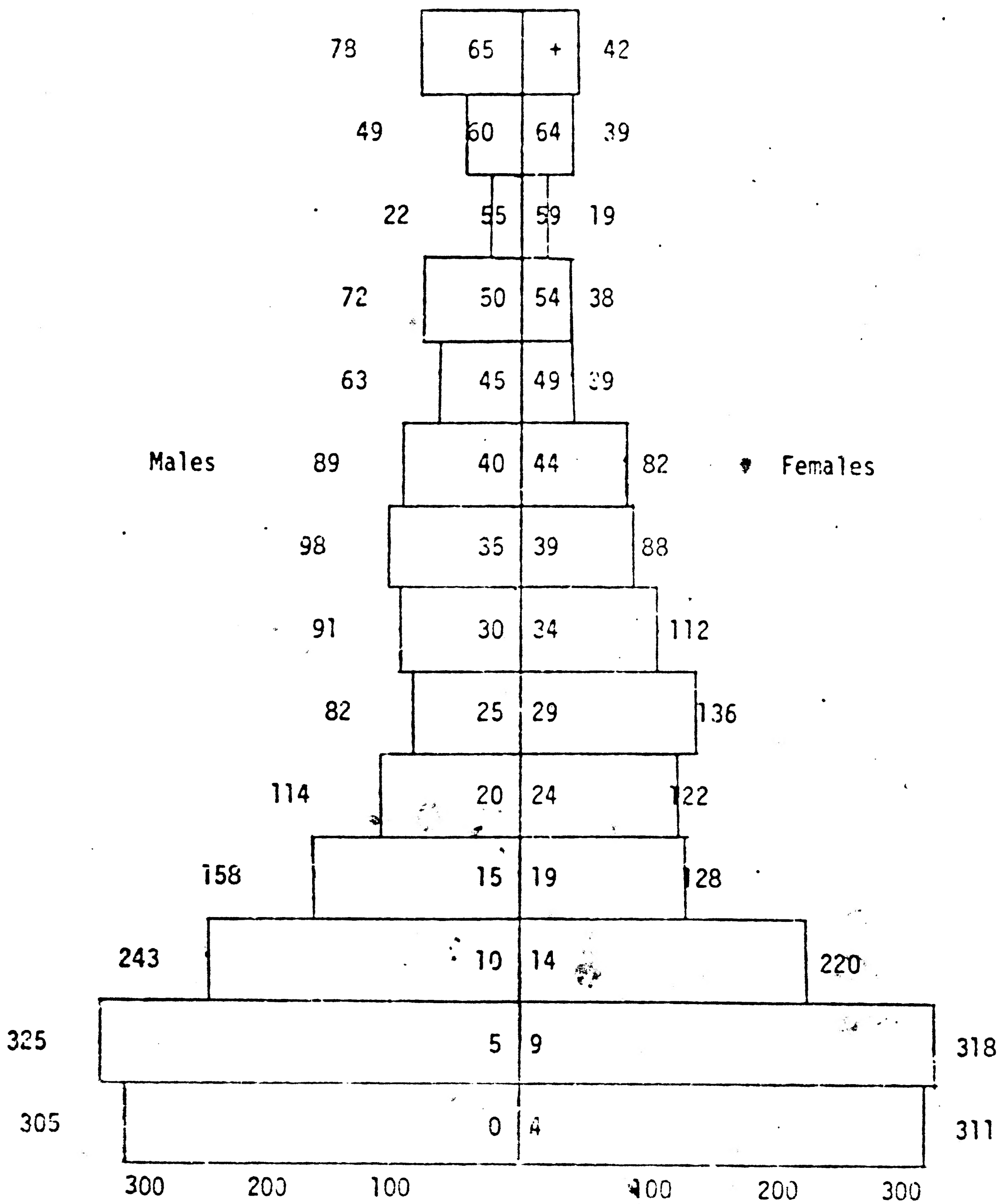
Median Age of Total Household 14.75

Percent Under 15 years of age 49.4%

Percent 65 years and over 3.9%

Dependency Ratio 114% $\frac{\text{Under 15 and over 65}}{\text{15-65}}$

4. Age-Sex Pyramid



5. Marital status of all household members

| Status | Percent |
|---|---|
| Now Married | 38.3 |
| Widowed | 2.5 |
| Non-Married | 59.2 |

6. Mean Years of schooling for persons 15 years of age and older

| | Years |
|---|---|
| Male | 1.99 |
| Female | 0.27 |
| Total | 1.15 |

7. Literacy of persons 15 years of age and older

| | Percent Literate |
|---|---|
| Male | 29.4 |
| Female | 3.5 |
| Total | 17.6 |

8. Occupation of persons 15 years of age and older

| | |
|---|---|
| Farmer | 47.2% |
| No Occupation/work | 12.6% |
| Student | 6.3% |
| Laborer | 5.7% |
| Shopkeeper | 4.3% |
| Mullah | 2.8% |
| Office Worker | 2.5% |

9. Number of Rooms in Household

| Number of Rooms | Percent |
|---|---|
| 1 | 38.9 |
| 2 | 31.1 |
| 3 | 11.8 |
| 4 | 7.3 |
| 5 | 1.8 |
| 6 | 3.8 |
| more than 6 | 2.5 |

Mean = 2.25
Median = 1.85

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MANAGEMENT SCIENCES FOR HEALTH

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# The Village Health Worker: The Need and Potential as Determined by Survey in Three Provinces of Afghanistan

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